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Vol. XII]

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President.

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EDUCATION AND OUR CONSTITUTION*

BY SHRI N. V. GADGIL

Governor of the East Punjab

THE All-India Educational Conference is meeting here in Punjab after a lapse of 25 years and the importance of this Conference is all the greater today when questions affecting fundamental conceptions of education have been raised in the course of the last few years. There is no doubt that great progress has been made in the field of education since India became free. Freedom was the aim, till it was won after a hard and grim struggle, but after its attainment, it has to become an instrument for the prosperity of the country all round. Within a few years of attainment of freedom, a radical change in the economic policy and thinking was effected. A planned economy has become now the working principle in all matters which concern economic and industrial activities of our country. It is more than a platitude to say that under a planned economy along with the material resources, moral resources of the community have to be planned and controlled. Hence the obvious necessity to put the entire system of education in the country on sound and scientific basis

2. Having taken a democratic constitution to themselves, the people of this great country have realised that the responsibility of every citizen in the new political set-up and order, has increased tremendously. In order to enable the citizen to discharge his new duties and responsibilities, it has become necessary that mental and moral equipment necessary for this purpose should be made available. The whole system of education, therefore, must be related directly to the great objective stated above. No democracy

can function adequately and effectively unless its basis, namely, the electorate, is intelligent and is capable of judging the great issues referred to it periodically, in a cool and sensible manner. One of the pre-requisites of a successful representative Government is that the electorate must be intelligent and must possess a measure of good sense to remain away from certain actions and tendencies, which would fundamentally affect the successful working of the Democratic State. In other words, there is clear necessity that education must serve the high purpose of rearing and maintaining the State to the standard required. The future of the country and the community is indicated in a broad way in the preamble of the Constitution and in its directive principles. To enable the people to build up that society, in other words, the new India, the system of education must be in accord with that ideal. The economic and material prosperity of the country is dependent upon what is being done in the fields and factories of the country. But what is to be done in the fields and factories of the country will be largely influenced by what is being taught in the schools and the colleges. In this context, the conception of education is obviously different from what has been current throughout the last so many decades. It is not suggested that education must serve the political interests of this party or that party, but it is merely indicated that education must, in some way or the other, be linked with production. In other words, the mental equipment of the child out of whom the future citizen is to emerge must be such that not only he will be a good worker, manual or otherwise, but that he will have a philosophy, and moral philosophy, which will

* Inaugural Address delivered at the 33rd All-India Educational Conference, held at Chandigarh, in December 1958.

be appropriate for the purpose for which he is to work, think and have his being. In the course of the last ten years, several committees and commissions have been appointed to review and recommend policies relating to all the stages in education, from Primary to the University. These reports are there and yet there is a feeling that a clear and categorical statement on the policy to be followed is lacking. Schools and colleges are fast increasing but it is stated by men whose opinions and views are entitled to respect, that real education is not being imparted in the schools and colleges, which are functioning today in this country. There is, therefore, a need to solve the problem of remodelling the educational edifice. The problems are not a few, solutions proposed are many, and there is little margin for further experiments, as the necessity to build up a real system of education is urgent. As stated by me earlier, the political necessity to have an intelligent electorate is supreme. Hardly, 16% of the people are literate. The electorate is round about 17 crores of people. Great issues regarding national and international questions are coming up and I have not the slightest doubt that many of them will become issues for elections from time to time. It is, in my humble opinion, of utmost importance that, all efforts should be made to implement the provision of the Constitution, which contemplates free and compulsory primary education before the year 1960. While this is to be done, I also think that it will be dangerous to neglect Adult Education. What should be done to push on a large-scale adult and mass education in this country is a matter for consideration for both the educational experts and the administrators. The country has accepted the ideal of a Socialist State, and as a first step towards it, Welfare State is the immediate objective, and a Welfare State cannot be conceived without adequate provision for education and other social services for the people at large. Age-long habits and customs and traditions which are today invalid and meaningless have to be liquidated. This task has to be done in the field of Primary and Secondary Education, no less in the field of Adult Education. Egalitarian social order, where caste and class have no meaning, is to be built up and in this huge task, mere school and college education, as we understand, will not be enough. For this purpose, means for mass education must be found, and people must be trained in the

art of judging men and measures, which vitally affect their well-being. A sense of discipline and a firm faith in the principles of truth and tolerance has to be developed. If the State that is going to be, is to stand for liberty, equality and fraternity, appropriate mental habits and outlooks have to be developed and all this has to be done by an efficient system of education in schools and colleges, and efficient propaganda which will do the needful in a mass way.

3. Today, everywhere one hears that students are no longer disciplined, and disobedience to the traditional authority of the teachers is equated with the virtue of self-respect. Only a few days ago, our Rashtrapathi, Dr. Rajendra Prasad, referred to the great indiscipline now prevailing in the student world. He has diagnosed the main causes and this diagnosis is correct to a substantial extent. The main cause of indiscipline is overcrowding in the educational institutions, whether Primary, Secondary, Collegiate. The individual attention that is the most important factor in imparting education is not available, when the students are too many. Education is essentially a process of illumination of the mind, in which the pupil takes the light from the teacher. If there is no personal touch that is so necessary, then it is no education at all. It is as good as teaching Hindi over the radio or learning by putting the records on the gramophone. At any rate, there should be no overcrowding in the primary stage of education and the selection of trained, good and well-behaved teachers is more important for the stage of primary education, than for later stages. The good old ideas of students coming to the teacher are now no more. The size of the class-room, the furniture and other equipment today weigh more with the education authorities than the temper and the talent of the teacher. The teaching has become a profession in which chances of advancement in career are considered of more importance than imparting of education to the students concerned. It is not my intention to blame anybody but it is desirable to know what the position exactly is. I concede that teachers, wherever they may be working, must be adequately paid but all the same one must, if one has to be a realist, admit that high standard of conduct and that high idealism, which were common experience in India, just half a century before, are now substantially conspicuous by their absence. The second reason for lack of discipline is

generally admitted to consist in the fact that the students do not believe and have no faith in the leadership of their teachers. This may be due to many causes but the fact is there. Another cause which is generally advanced for lack of discipline is that the student world is no longer idealistic as it was in the past. This may be true to some extent but it is more due to the fact that the atmosphere all round him is such as to make him less wedded to idealism. Dr. Radhakrishnan, Vice-President of India, has said again and again that the country is passing through a crisis of character. The first fruits of freedom were expected to be something different from what they have actually been. There is no doubt that some men and women are doing their utmost and best to translate into concrete terms the high ideals for which they fought and suffered. The second world war has left the world many bad legacies and the result is that moral values and high ideals which inspire men and women to do their best and noblest and to suffer nobly and with dignity have in fact disappeared. Verily calculators and money-changers have entered the synagogue and it will take quite a long time and great efforts on the part of the leaders of this country to clear them out from the place but the mischief is already there, and if we want the new India to be built up as we desire, all efforts must be made to see that the young generation which will inherit the leadership soon consists of men and women of right temper with a high sense of purpose, honest and straight-forward. We can belittle ideals only at great cost both to the present and the future generations. In this context it is necessary also to consider what should be the type of Secondary Education, whether the present system is good enough for the task that lies ahead or whether suitable changes should be made at the beginning of the stage of Secondary Education by introducing suitable changes. Today unemployment is growing all round but more among the educated classes. Social utility and purposefulness of education are matters which cannot be lost sight of. Surely it is not the object of our educational system to educate a vast number of students and leave them without any employment at the conclusion of their education. It is, therefore, necessary that there should be a school curriculum evolved round a group of important subjects which will offer alternatives to suit the aptitudes of different people. A choice

should be made, more or less, by the students themselves but under a general direction of the school authorities as to what education they should have from that stage onward. In my view, the student should be trained right from that stage to a craft or a calling, for which he has an aptitude and for which there is a clearly established national necessity. Apart from those who go in practically for the technical education at this stage, there should be provision in the curriculum itself to make the student "machine minded" and just as in the scheme of Basic Education, children are expected to be trained through activity, some such thing should be also made possible even in the Secondary stage. When a student takes to education of a craft or a calling at the beginning of the Secondary stage, there must be also some provision for general education. Some such thing will create a certain maturity of body and mind and enable the student after the completion of education, better equipped to meet the ups and downs of life. As regards the pattern of University education, in spite of reports from many expert committees, the position is still uncertain. The object of University education is to enable the student to acquire specialization in some particular branch of knowledge. Even here at the University stage, provision can be made for general knowledge which will enable the development of an integrated personality and a sensible view of life. In short, from the Primary to the University stage, the process of education must be definitely related to certain objectives. One of such objectives must be the development of the personality of the child so that at the conclusion of his education, whether technical, general or specialised, he should be in harmony with himself and should have confidence that, which one fully mentally equipped will possess. The other objective is that the individual concerned should know definitely the social function he has to discharge as a member of society and the State and he should not feel, at the conclusion of his education, that he is isolated from the main current of social life and has just to take a chance in the vast and unchartered sea of life so far as he is concerned. The duty of the State is to give such education to the child as will bring out the best from him and train him for such a vocation as is in accord with his aptitude and temperament and ultimately to fit him in the scheme of things which enable him to lead a life of hope and effort.

4. No problem of education can be successfully tackled without considering the supply of good teachers at all stages. Today many people take to teaching just because there is no other avenue open for them. The profession of teaching should not be just a resort for those who have failed to get on in other lines. Teaching must be a matter of choice and pleasure and this is only possible if the terms and conditions are attractive enough. Men with no large vision or more than average ability cannot carry out the high purpose for which education stands. They may carry out what traditional education stands for. The creativeness which is so necessary even in this field is not there today on the scale one requires in the present state of our country. If we want our children to develop initiative, and drive and to make them imaginative and adventurous, we must have teachers who have these virtues and who will think continuously and, by personal contact, impress the students in their charge. Today the conditions in which the teacher has to live his life are not ideal. However, to improve the lot of teachers at all the stages of education, is a necessity and is admitted by all. There are the financial considerations which cannot be entirely disregarded. Expenditure on education is really investment, the dividends of which the country gets in having a better type of citizens. In other words, the investment in education is moral investment and yet the financial difficulties are real and cannot be got over by one stroke. The society must realise that it is necessary that the teacher must be a contented soul and the teacher should realise that he is not just a factory worker or a clerk in any department but he has a responsibility different from any other member of the society inasmuch as he is responsible for the shape of future things to come. After all, it is men who finally determine what the society will be and it is the teachers who determine what the men will be. In this context, the position of the teacher is more important than what many are prepared to conceive. A Chinese proverb says, "He who knows better is a teacher and everybody learns from everybody else."

The progress made by our country during the last ten years is not meagre but much more could have been done if there had been greater determination on the part of all concerned. In a recent publication entitled "China's Big Leap Forward" the total enrol-

ment of elementary schools increased from 2,40,000 to 6,40,000 in the course of 8 years ; of Middle Schools from 10,00,000 to 60,00,000 ; of Vocational Schools from 3,50,000 to 7,78,000 and of Universities and Colleges from 1,55,000 to 4,45,000. The number of engineering students increased during these years to nearly five times that is 1,63,000. This progress is due to the close attention paid by the Government and the co-operation it secured from the people themselves. In China, education is definitely linked up with production and class work is in close connection with the same. To quote from the latest report, "All of them (schools) have these characteristics in common, class works in close connection with production, unity with progress, method and subject-matter of instruction adjusted to production, needs and available time, place and personnel". One result of this is, that most of these schools are entirely or largely self-supported. Eighty-three per cent. of the school-age children are in school today in China. In China politics is studied as a part of curriculum from the Secondary stage. Lectures on socialism as a regular course are given in all schools. Whether India should adopt this line is a matter for the consideration of the leaders of the country. It may be said that if the object of education is to prepare the student to discharge adequately the duties of a citizen of a State which stands for certain objectives, it is necessary that he must be educated in the philosophy which stands behind those objectives. If India stands today for socialism through democratic methods, education then must create the spirit of democracy, a spirit of enquiry and a spirit of toleration. The world today is standing at cross-roads and he will be a bold prophet who will predict boldly what will happen tomorrow but it will be an elementary wisdom on our part to make provision for the adequate education of our children, adequate in spirit and adequate in quantum of knowledge. New values are gradually emerging. The citizen is expected gradually to adjust himself to the new, retaining as much of old as is found to be good. Education is a catalytic agent of this adjustment and this fusion without violent clashes. I have given expression to what I feel as a lay-man. It may be that whatever I have said really constitute platitudes, but philosophy ends in platitudes and let me add that out of platitudes new philosophy emerges.

THE CREATIVE ROLE OF SCIENCE AND TECHNOLOGY IN EDUCATION*

BY DR. K. L. SHRIMALI

Minister for Education, Central Government

I AM grateful to you for the honour you have done me by inviting me to preside over the 33rd All-India Educational Conference. I am fully aware of the magnitude of this task as also of my limitations. Being sure of your co-operation, however, I have accepted this responsibility and I approach this task in all humility. I am not a stranger to this Conference. There are many among you whom I have known for more than two decades and with whom it has been my privilege to work together as a fellow-worker. This Conference has been instrumental in bringing together educators from the different parts of the country and by focussing their attention to the problems which confront them from time to time has developed among them a sense of unity and purpose. In a period of transition when there are no beaten tracks to be followed, the task of the educators becomes difficult. It is the responsibility of this Conference to give them a proper lead so that they may succeed in giving proper guidance to the younger generation.

Indian education today is at the cross-roads. As changes take place in our social, political and economic life, the educational system must also undergo transformation. At a time when society undergoes rapid changes, education which has a social purpose cannot remain indifferent to these changes. In fact, it has to become to some extent instrumental in bringing about the desired changes. It is only by becoming responsive to social change that the educational system can retain its vitality.

India is gradually but steadily moving towards science and technology. This movement has been greatly accelerated since independence. A large number of scientific laboratories and technological institutions have been set up and students in great numbers are attending courses in science and technology. The growth of science and technology is bound to produce far-reaching changes in the attitudes and habits of people and transform our social institutions. Among the educated people there is already a loss

of faith in religion. It has lost its hold over many young men and women who come out of the Universities. In their thinking and daily activities religion plays a marginal role. A civilization which has been the nursery of some of the most important religions of the world is becoming secular under the impact of science. Here the question naturally arises: Will India turn its back altogether on its old religious tradition in quest of science and pursuit of material comforts? It is difficult to answer this question since the future cannot always be predicted. It is, however, possible to some extent to shape the course of events and it is towards this end that education must constantly strive.

Secularism does not mean that individual persons in their personal lives should remain indifferent towards moral and spiritual values. A secular State does not aim at the annihilation of religion. It only remains neutral towards religious matters and would neither interfere with a man's creed nor would it use the machinery of the State for the propagation of any particular religion. A secular State may emphasise moral and spiritual values and still remain indifferent towards particular religious creed or dogmas. In fact, a democratic society which respects the dignity of the human personality is based on a deep and abiding faith in moral and spiritual values.

With the growth of the scientific spirit, it is natural that people should develop aversion towards that religion which is associated with bigotry and intolerance. Science is opposed to all kinds of dogmas whether they are religious or political. It overturns all kinds of orthodoxies based on caste or creed. It is opposed to authoritarianism and political conformism. It strikes against rigidity and social stratification. It is, therefore, bound to uproot many of our cherished beliefs and social institutions. We need not have any regrets for this loss provided science develops at the same time a positive faith in those moral and spiritual values which are the roots of democratic life. It is necessary to stress this point lest the one-sided development of science and technology should cramp human life within the narrow value

* Presidential Address delivered on the occasion of the 33rd All-India Educational Conference held at Chandigarh, East Punjab, December 1958.

scale of economics. It is only by keeping before us the spiritual conception of the human personality that we can make proper use of science and technology for the ends of individual life and not allow the individual to be used as an instrument for the purposes of power. With the rise of the arc of material wealth and prosperity, the arc of inner, social and moral vigour should not go down. It is here that the educator has to play his distinctive role. While the spirit of science should be all-pervasive in our schools and colleges and the students must learn how to use their minds, it is the responsibility of the educators to ensure that they are not dehumanized in their pursuit of science and technology. Society needs scientists and technologists, but more than that it needs good human beings who are sensitive to the beauty as well as to the tragedy of life. Education must aim at developing the whole person. It must certainly sharpen knowledge but it should not ignore the important task of fashioning beliefs among the youth. This should be achieved not by reverting to the teaching of philosophic and religious views which have no relevance to the problems of the modern world but by providing opportunities for productive living and creating among the students a sense of social responsibility.

In our country, scientific work is confined mostly to the laboratories. Science has exercised very little influence in the everyday life of the people. We can find the most modern scientific and technological institutions co-existing side by side with social institutions based on orthodox beliefs and superstitions. For the proper growth of scientific thought it is essential to make science all-pervasive. Science must be utilised for improvement of the physical and social environment so that it may provide more congenial atmosphere for the development of human personality. This can be done only when the gap which exists between the everyday life of the common man and that of the scientist is bridged and new creative energy and imagination released for social planning.

One of the greatest obstacles to the growth of science is the rigidity of the social structure. The spirit of science flourishes in an atmosphere of freedom and requires free communication. It is not just a coincidence that the liberation of man has gone side by

side with the development of science. Science and democracy draw inspiration and support from each other. It is true that great scientific developments have also taken place in totalitarian countries under the control and direction of the State, but ultimately either the spirit of free inquiry must triumph or it must be repressed. The spirit of science cannot flourish in a closed society.

A hierarchical society like ours which lacks mobility has a repressive effect on science. Recently, there has been some movement within the middle area and as a result of expansion of public education there is an upward trend towards the middle class and within it from one stratum to another. The children of lower middle classes are able to receive college education and have better income position and more power than their fathers and grandfathers had enjoyed. There is some mobility within the middle classes but it is still difficult to rise from the ranks of the farmers and unskilled working classes at the bottom of the income pyramid to the top. At the top there is continuity of class by which a son inherits the enormous advantage of his father's position. The children of the farmers and workers have no school facilities. Even, if they manage to go to some primary school, the conditions of schools are so miserable that they can hardly complete with the children of the upper classes. Very often they leave the school at an early age to give some support to the family and they never get back to the schools. These boys therefore can never hope to reach the highest rung of the ladder which is open only to the children of the privileged class.

How can science flourish in a society in which the majority of the people are doomed to a life of stagnation, poverty and ignorance? A rigid and stratified class structure cripples the scientific spirit and the only way to remedy the present evils is to make way for greater mobility by reconstructing the educational system. It must enable students of the lowest income groups to reach the highest ladder of social prestige, power and income by their ability and hard work. The economic barriers which stand in their way and which prevent them from deriving the maximum advantages of education will have to be pulled down by making provision for free and universal education for all classes. It should also be the responsibility of the State to ensure that no student who

has talent and ability is denied the opportunity of higher education. A system of free and universal public education and easy access to college education will by themselves exercise a great democratising influence in making the classes fluid. When opportunity and social experience are equally distributed, they bring about social equilibrium which in itself will help in releasing the new social energy needed for developing a scientific and technological society.

At this stage, a word of caution is necessary. Science and technology have brought great benefits to humanity, but they are by no means an unmixed blessing. They have been put to wrong use and have also brought ruin and disaster to civilizations. The future of our civilization depends not merely in making use of science but in making good use of it. We can learn from the experiences of the West and avoid pitfalls which have brought them misery and suffering repeatedly.

In the development of science and technology one of the dangers against which education has to make necessary safeguards is over-specialisation which leads the scientists to withdraw from all questions relating to values and human relations such as politics, morals, religion and æsthetics with the result that he becomes merely a tool in the hands of other persons and executes interests and purposes which are not his own. Specialisation is essential for acquiring mastery of science and technology but if this creates a wall between the realm of science and the realm of morals, society faces a great disaster. The discovery of the atom bomb has jolted us into the realisation that science may remain objective but it cannot be neutral towards fundamental, social and moral values. The pursuit of truth and knowledge requires single-minded concentration but it is fatal to society if it leads to social apathy. Science must grapple with

the ethical consequences of techniques if society is to be saved from disaster.

There is a tendency on the part of the educators to treat Science and Humanities as separate disciplines. This separation is partly responsible for the present moral crisis. Though man's power of understanding has greatly increased, a vast majority of people still remains in a state of fear and want. Man's intelligence has placed great power at his command but his moral nature has not been able to cope with them. The remedy of the present ills lies in reconstructing the educational system which may bring about a union of arts and sciences. Man must not only be initiated into the mysteries of science to satisfy his curiosity and thirst for knowledge but must also learn to make proper use of science. He must learn to control his passions such as fear, anxiety, hatred and competition which drive man to use science for destructive purposes. With the help of the physical sciences man has acquired mastery over his physical environment and now with the help of social sciences he must learn to control his irrational impulses so that he may acquire mastery over his social environment. He must be in tune both with the life of nature and the life of the spirit. Can education perform this task? The fate of civilization hangs in the balance and its future depends on the way in which we can answer this question. The greatest problem before man is to humanize science and technology so that they may play a creative role in society.

I thank you once again for having given me this opportunity to place before you a vital problem which the educators have to face today. The survival of our civilization depends on the way in which we can adapt science and technology to suit the culture and genius of our people. Education will have to tap all the sources of creativeness to meet this challenge.

What is Education ?

"Education is but a phase of general itself to nature, until it enters sympathetic-process of evolution ; it is a development by which the individual comes into realisation participates in the achievements of the race of the life of all encompassing unity of and the aspirations of the humanity."— which, he is but a unit ; a development by which his life broadens until it has related

EDUCATION AND ITS FUNCTION*

BY SHRI AMAR NATH VIDYALANKAR

Education and Labour Minister, East Punjab

I consider it both a pleasure and a privilege to welcome you all to the 33rd Session of the All-India Educational Conference. It may be recalled with interest that it is after a lapse of about 26 years that this important Conference is meeting in the Punjab. It was the 8th Session of this Conference that met in the famous city of Lahore under the chairmanship of Dr. Ziauddin Ahmmad. The Punjab Education Department, the Punjab University, the Punjab Educational Association and all organisations and citizens of the State very much value this occasion and most heartily extend their greetings to the delegates and the distinguished visitors who have come all the way to Chandigarh, our new Capital, in this cold weather.

The growing city of Chandigarh greets you. If I may be permitted to say so, Bhakra-Nangal and Chandigarh, these twin projects symbolize the new spirit of virile and rapidly advancing people of Punjab. Some of you will visit Bhakra-Nangal and about Chandigarh and its unique architectural planning, you must have heard or read a lot. Let me introduce you to some of its main features.

The greatest beauty about Chandigarh is its sub-mountainous location at a distance of about five miles towards the south-west of the Ambala-Kalka Road. Possessing bracing climate, the city has an area of 15 square miles bounded on the north by a double chain of picturesque Shivalik Hills and fringed on either sides by two riverbeds, three miles apart. Chandigarh is thus endowed with a good wealth of natural beauty.

The city as a whole represents the human figure. The total area is divided into a number of sectors. Each sector covers half a mile in one direction and three-quarters of a mile in the other. Every sector has been planned to have about 15,000 people, and will be self-sufficient with its own school, dispensary, children's park and market-place. This city of the future, which is still in the

process of being born, is the result of the joint imagination of a number of foreign and Indian architects and engineers. Besides presenting the latest in the science of architecture, Chandigarh presents a bold experiment in evolving a symphony in the basic requisites of modern civic life. The residential quarters are divided into 13 types, according to the official status of the residents, but even the lowest type offers very adequate accommodation and facilities, more than hitherto received by this class of people. In the words of Jawaharlal Nehru 'Chandigarh is symbolic of the freedom of India, unfettered by the traditions of the past'.

It certainly is not a bad setting for such an important conference.

We feel all the more grateful and encouraged by the distinguished presence amongst us of Shri N. V. Gadgil, Governor of Punjab, who has so kindly consented to inaugurate this session of the Conference. It also fills my heart with joy and confidence that such an eminent educationist as Dr. K. L. Shrimali, Education Minister, Government of India, is going to preside over the deliberations of this Conference.

There is a very ambitious list of topics which will be covered in the general and sectional meetings of the Conference during the next four or five days of your deliberations. And luckily, we see here gathered today the foremost educationists and intellectuals from all over India, rich in experience, renowned for their brilliant record of achievements and endowed with mature judgment, who will continue to guide these deliberations. I am quite confident that by pooling all your wisdom, experience and constructive thinking together, you will in this Conference succeed in answering the great challenge, that the Education in this country today has to answer.

The right to speak from this forum veritably should remain reserved for those who could speak on the various aspects of education with some knowledge and authority and I, only a lay-man, have no intention whatsoever, to usurp that right. However, it will not be altogether out of place, if on the eve of this Conference, I had placed before you the common man's point of view also.

* Welcome Address delivered at the 33rd Session of the All-India Educational Conference on 27th December 1958.

The common man in India today entertains high expectations from our educational system. People have their hopes and aspirations, as well as doubts and apprehensions.

The common man in India cannot comprehend or grasp the conception of true education in abstract terms. Its utilitarian aspect is the most important from his point of view. Any system of education that might be in vogue must be geared to the needs and urges of the community.

It must, however, be admitted on all sides that our present system and structure of education is hopelessly out of date, and lacks the essential qualities to meet the urgent needs of reconstruction. Let those who possess the skill accomplish the task of reconstruction of a new system in as short a time as possible.

The first and most important test that our education should answer today is, whether it endows and equips the average Indian citizen with minimum qualities of citizenship, and whether it is fully conscious and confident of meeting the most pressing and exacting requisition for suitable human material, made by our system of political and social democracy.

Ours is the biggest and, perhaps the most ambitious, democracy in the world today. Democracies in the world now-a-days are passing through many vicissitudes and the fortunes of many yet hang in the balance. Democracies depend almost entirely on the virtues and capacities of the 'Demos', the people. The future of our democracy, too, is inescapably linked with and governed by the quality, calibre and character of our citizens and their outlook and vision. And here is the real challenge that our educational system must meet: Are our schools and universities capable of producing citizens who are men of quality and who possessed the capacity of successfully working and building up a truly democratic system in our country?

The right type of human material is the first and most urgent need in our country today. We have, of course, succeeded in building up huge dams, in laying the foundations of magnificent cities. We have constructed imposing factories and have made extensive agricultural farms. Our scientific laboratories in quite a large number are conducting research and their work has already received recognition for its splendid quality and worth. With all our effort we shall

indeed succeed in producing and possessing enormous material wealth; and still we should not forget what once the poet Goldsmith had said:

Ill fares the land, to hastening ills a prey,

Where wealth accumulates and men decay.

Our system of education and our institutions are on trial today. We are facing stupendous difficulties and ordeals in the way of getting right type of men in all the fields of national life. And although I have no desire of sounding a pessimistic note, I warn our educationists to carefully examine and be sure that the human material that they were handling had not already started showing remote symptoms of decay.

Till recently we attached much more significance to our school curriculum and class-text-books. Of course, these are important aids to the acquirement of knowledge. But mere acquirement of knowledge is much less than complete education. Acquirement of knowledge is not the 'be all and end all' of education. Perhaps it is the beginning. Our children must learn and practise the art of living, and living profoundly and dynamically. "तेजस्विनावधीतमस्तु". The knowledge must acquire dynamic qualities in order to be put to proper practical use.

In order to achieve this end, besides acquiring knowledge, our children should be assisted in cultivating in them the capacity of correctly assessing and appreciating the relative values of the self-restraint and highest order of disciplined life, natural dignity and keen sense of honour, sensitive appreciation of the needs of others and an attitude of respecting them, capacity to discriminate, decisiveness and the ability of forming balanced judgment: these and similar others are the virtues that are indispensable, at least in some degree, in every citizen of a successful democracy. Our education must lay sufficient emphasis on cultivating these virtues in our young men, if we are to survive as a great democracy. Strong destructive and disruptive tendencies that raise their ugly head from time to time, mainly due to unbecoming rivalries for political power or due to our narrow conceptions of casteism, provincialism or localism, communalism and linguism can be successfully countered only in the field of education "सा विद्या या विमुक्तये". True education is that which can show us the true way and save

us from impending disaster. Howsoever imposing degrees you might confer on the graduates from your universities, unless through long process and practice, their minds have been freed from the bonds and fetters of "अविद्या", ignorance, prejudices, orthodoxy and superstitions, narrowness of vision and pettiness of mind, your education has not achieved its true purpose. When your graduates will enter the practical life, it is possible they might shine with a borrowed lustre, emitted by external surroundings, such as by inherited or acquired wealth, bookish knowledge or by some position or status acquired with the help of organised gangs of one's followers; but unless they are sufficiently enlightened they will remain like dead stars devoid of any power of producing and emitting light and warmth for the humanity. The position and status in the society will become a dead weight and burden for them. One hardly enjoys a position, status and distinction unless one really possesses those fine virtues of leadership that naturally draw human beings towards him.

Modern education has tended to remain excessively 'individualistic' with competition as its watchword. It has failed to give our children practical lessons in the "समाज धर्म" and to cultivate proper social outlook. In our educational institutions, teachers and students continue to remain highly self-centred, isolated and exclusive. While laying emphasis on the fullest development of the individual, we forget that the development of an individual does not take place in a vacuum; human individuals achieve highest order of their development within the society. The full development of the man can never be accomplished in isolation. Our true aim should be the fullest development of an individual's 'social personality' and not mainly his 'individuality'. One's social personality can be properly and fully developed only by remaining in close contact with one's fellow-members in the society. Pulsations of one's heart should become as much identical as possible with the pulsations of the humanity, so much so, that under the impulses of highly developed social instincts, one feels in complete unison and harmony with the rest of the humanity and gives expression to his natural urges, thus :

"न त्वहं कामये राज्यं न स्वर्गं नापुनर्भवं ।
कामये दुःखतप्तानां प्राणिनिमित्तनाशनम् ॥"

'Discarding all worldly blessings, one's sole desire remains to promote the well-being of all humanity.'

A country's progress depends on the degree of selfless devotion to social causes shown by its citizens. It depends on their capacity for voluntarily subordinating and surrendering their 'individuality' for the sake of 'collective' life and well-being of the whole society. The cultivation of this social instinct should be an indispensable part of duty in our educational system.

Just as our Prime Minister had recently stated, "The touchstone should be how far any political or social theory enables the individual to rise above his petty self and thus think in terms of the good of all. The law of life should be not competition but co-operation. We have to give this new direction to education in order to evolve a new type of society."

Another but no less important function of our education today should be to prepare our children for hard and tough struggle for existence. Ours is a poor country. Depending on our own available resources of men and money we shall have to produce enormous amount of wealth before every citizen of India is enabled to enjoy a decent living. Therefore, our education must also produce in our children the capacity to earn their living. This is possible only if our education lays equal emphasis on its practical as on its academic aspect. Till recently our education has lacked vocational bias. From strictly economic point of view our education from the primary to the highest standard has become a big liability. As we usually observe today, if average educated young men, having undergone the whole process of education possessed less earning capacity than their fathers, their education must be considered an economic liability.

Our educational system should be re-organized to combine study with work, preferably at the actual place of work, in order to provide special training for work, depending on the local and individual needs. The blind race for opening traditional type schools and Art colleges must cease at once, and at each educational centre, technical and vocational classes should be arranged for every child. The study and work, thinking and doing, should go hand in hand. Doing without thinking is bad enough but thinking without doing is equally dangerous. Our curriculum should be so modified that at

least six periods at primary stage and twelve periods at the secondary stage in every school should be devoted for the technical and vocational education of every child. Not every child should be expected to join the High School and the University. It should depend on individual aptitudes. Universal education up to the Secondary Standard, till the child attains the age of 14 or 15, should be sufficient to equip our boys with adequate knowledge and capacity for selecting their diversified lines, and they should then begin to feel the urge to work in the field, factory or a shop with a view to rapidly becoming the earning members of the society. This is so in almost every modern country, in Germany, in France and in Russia. Orthodox educationists will be shocked at the idea recently conceived by the Soviet educational authorities who, in their New Secondary Educational Plan, have provided that the children should compulsorily work in State enterprises in order to give them actual work training. I do not go so far as to advocate almost a system of 'Juvenile Labour'; but it shows the direction of the wind in modern countries today.

To suit the new shape and reorientation of our educational system, radical changes in curriculum, syllabi and text-books will be required. Here we shall have to counter sufficiently fortified and strongly protected vested interests. We shall have to put in a heroic struggle. Our text-books present a serious problem for us. Today most of the text-books are written in most indifferent manner. We have produced yet very few really good text-books. A really good text-book cannot be easily substituted for by the cheap and worthless help book that has recently become a malediction in the educational field. It requires collective national effort to produce really good text-books. Have we ever thought of mobilizing all the talent and accumulated experience of thousands of our teachers in the actual field of teaching work? We must evolve methods and means to utilize the collective wisdom and pedagogical experience of our teachers in the preparation of good text-books.

Then we face the problem of having really good teachers and also having them in sufficient numbers. Today most of our States are suffering from want of sufficient number of trained teachers, although Punjab is fortunate in being a surplus State in the supply of trained teachers.

The teacher in India is destined to play a most significant role. He is to be the real architect of the new India. An architect and artist fills with his genius and skill, the dead material with beauty, charm and freshness of life. The teacher, however, handles the living material, budding and bubbling with the energy and life; and that teacher would be unlucky who had produced with such fine raw material lifeless automatons, or grown up human toys, devoid of all spirit and inspiration of life.

Teaching should be taken not only as a profession but as a passion and mission in life. The skill and art of teaching strengthens the teacher's work as a profession and the spiritual vigour and nobility of teacher's character and aspirations transforms his profession into a mission. Tender-aged living material must be handled with utmost care, not by a few lifeless machines, although human in form, but by real teachers who have an aim and mission in life, to make good citizens out of that raw human material. The teachers should, therefore, work with the urge of a great mission and not teach in a lifeless and mechanical way as mere mercenaries.

However, to get really qualified and right type of teachers, will remain only a cherished dream, unless teacher's status and position in the society was sufficiently raised and he was again elevated to the high pedestal of the 'Guru', not only of his pupils but of the whole community. The social and economic status of the teacher, his training, method of recruitment, conditions of work and professional relationship are, therefore, matters of vital importance. The standards of teaching and instructions in the teachers' training establishments will have to be sufficiently raised. We should set much higher standards than those existing, for general and professional training. The basic qualifications required for admission into training institutions also need to be raised. The development of general cultural standards and personality and character of the teacher should be given greater prominence. In order to ensure full social status to the teacher, he should be allowed full freedom to exercise his civic rights. He should be fully protected against any arbitrary decisions affecting his professional career. Every effort should be made to make teaching an attractive profession. Also, the relations between the teachers and inspectors should

be cordial and respectful. The inspectors must not adopt an arrogant attitude towards the teacher, nor should he play just a patronizing role. While supervising teacher's work and exercising controlling functions, the inspector should take care to protect the initiative and personality of the teacher. These and other matters involve a radical change in our traditional methods of organizational behaviour. Teacher, in short, must be made popular and respected member of the community—its true guide and he should not, as at present, be reduced to the low status of contemptuous nothingness.

Today we hear much about the problem of indiscipline amongst the students.

Education and indiscipline are the two contradictory things. Because, disciplined behaviour is the external expression of one's culture and education. "विद्या ददाति विनयम्". Knowledge gives one humility and modesty, while arrogance is the sign of vulgarity and ignorance. "भवन्ति नम्रास्त्रयः फलोद्गमे". When trees begin to bear fruits, they become humbler; likewise knowledge makes a man humbler and more conscious about his behaviour. Indisciplined behaviour is the sign of lack of culture and good education.

Fortunately, students in the Punjab have, in recent years, given much better account of disciplined behaviour than their counterparts in the other States. The Punjab is the border State. It is the sword-arm of India. A Punjabi citizen ever expects to be called upon within a moment's notice to function as a full-fledged soldier, in the defence of his country; and, therefore, he must cultivate in himself all the true qualities of a disciplined soldier, and uphold traditions of disciplined behaviour. May be, the Punjab student is somewhat instinctively conscious of his responsibility in this respect. But such like ugly scenes, as had been enacted at many places outside Punjab by the student community, have never been heard of in this State. My intimate association with the student community in Punjab has confirmed my confidence in their good qualities, and if they are handled wisely and properly, the Punjab student will continue to give a better account.

Indiscipline, truly speaking, is a problem that is teacher's own creation. It is an effect, an inevitable reaction of wrong and careless handling of the human material. It is also a symptom that symbolizes lack of tutorial qualities in the teacher. Mere sermonizing

will be of little consequence. Actual practice is better method of imparting instruction than preceptive exhortations. Lack of the sense of responsibility in the students should be met by gradually throwing more and still bigger responsibility on the students and by encouraging them to undertake collectively still higher tasks of responsibility. Cultivation of a collective sense of responsibility is an effective antidote for the disease of individual indiscipline.

Even most irresponsible and undisciplined behaviour on the part of the students should not become a nightmare and frighten the teacher. He should never lose his self-confidence, and courage, should retain his poise and balance. The struggle between the student and the teacher should never be allowed to take the shape of a tussle for prestige. Whatever might happen, parents will remain parents, and the teacher will remain the teacher. The student has the privilege of learning by committing mistakes. By keeping up the right attitude towards the pupil, the teacher is bound to influence and mould his behaviour.

It is not through the measures of restricting and curbing the activities of the student's unions that a sense of discipline could be generated. The more encouragement to the organized collective activities of the students is given, the more avenues will be opened for their functioning in the disciplined manner. Only the mode of their organizational set-up must be according to the true democratic principles, and not based on any form of authoritarianism, which leads to the habits of blind following.

The teachers should also cultivate living contacts with their students. They should eagerly seize every opportunity that might occur of participating in all the students' healthy activities, such as, sports, debating clubs, excursions, and various cultural activities. It is here, in these fields, that the teacher could exert his influence most. He should also show real personal interest in solving their individual and collective problems.

Proper attitude on the part of the teacher will surely draw proper and desired reactions from the side of the students also.

Our educational institutions, in short, should establish dynamic relationship with the active life of the community, with all those community institutions, which have equally important roles to play in the total

education of the future citizen. The school does not exist only for the pupils and the staff, nor can it function efficiently solely through their efforts. It is a community institution, and needs community support and assistance if it is to fully achieve its social objectives. One of the main reasons for the ineffectiveness of so much of modern education, is the attitude of mutual indifference, and often active hostility that exists between the school authorities and the wider community. Unless this hostility and indifference takes the shape of sympathy, understanding and active co-operation, the education given to the child will always be lacking something vital. Hence every effort should be made to make the school a focal and vitalizing centre in the community. One of the best and common means towards this end is the establishment of active and effective Parent-Teacher and Old Boys' Associations in every school. Such associations can serve as vital links between the school and the com-

munity, interpreting the school to the community and the community to the school. They can be used as an instrument for shaping community attitudes to the school, and link teachers and parents in a happy partnership. No doubt we already have some such associations in many schools, but, I feel, they have yet to be worked properly and efficiently. Mere academic existence means nothing.

I would also like you to dispassionately review the Modified Scheme of elementary education as introduced in Madras a few years back but later abandoned. This was a remarkable method of associating the community with the day-to-day work of the schools. The country craftsmen could also be associated with craft-work in Basic and Higher Secondary Schools as long as there is a dearth of craft-teachers.

The above are some of my rumbling thoughts that I very much wished to put before this august audience.

LETTERS TO THE EDITOR

The Decimal System of Coinage and Teaching in Schools

DEAR SIR,

As you are kindly aware, the Decimal System of Coinage was introduced in our country more than a year ago—the basic unit being 1 nP.—going up to 100 for a rupee.

In the old system we had 1 pie going up to 192 for a rupee. But the counting was very much facilitated for children and masses by the terms anna, four anna (₹०००), eight anna and half-rupee.

In countries where they have the Decimal System, for example, in U.S.A., they have the terms—Nickel for 5 cents, Dime for 10 cents, Quarter for 25 cents, half-dollar for 50 cents. The use of such terms facilitates the easy manipulation of calculations within a dollar. Such terms are universally common and are found in all Elementary School Arithmetic Text-Books. Such terminology has a very great psychological advantage in the learn-

ing of Arithmetic particularly by young children. The concept of 100 with hundred units is too difficult to be grasped by children and innocent masses of our country.

I, therefore, beg to suggest to the authorities concerned that an All-India common terminology for a Five Naye Paise coin, a Ten Naye Paise coin, a Twenty-five Naye Paise coin and a Fifty Naye Paise coin is an urgent need and will, I believe, facilitate the preparation of New Arithmetic Books and will also help very much the masses of our people in daily transactions.

Thanking you,

Yours sincerely,

DR. M. SIDDALINGAIYA,
Director, State Education Research Bureau,
Bangalore.

[A very timely and significant suggestion for early consideration.—Editor.]

SCHOOL RECORDS AND PUBLIC EXAMINATIONS*

BY SHRI D. VISWESWARAIYA

Principal, Post-Graduate Basic Training College, Dodballapur, Mysore State

EDUCATION AND EXAMINATION REFORM

THE All India Federation of Educational Associations has done me a great honour in inviting me to preside over the Examination Section of this, the 33rd Annual Conference. No one else is more conscious than myself about the inappropriateness of the choice. It should have fallen on abler and more experienced shoulders, on men of eminence who could speak with authority on the subject "The Place of School Records in Public Examination". I have accepted this position with all the humility and all the modesty that I can command as a humble worker in the cause of education and will try to discharge my duties with sincerity and devotion, being confident of the goodwill and affection of all the delegates who have gathered here. If at all I have any claim for this honoured place, it is the fact that I have been very much conference-conscious for the last several years; often attending and participating actively in conferences of teachers, and sometimes, myself taking the role of organising big conferences of teachers. I have come to believe that a conference is the place where the teachers gain real experience which they have missed in teacher-training institutions. And, still more, the living contacts between educationists and educationists will have a very salutary effect to enlarge their outlook and to broaden their vision. Another claim of mine to this honour may be that I have been a teacher these 35 years and have seen batches after batches of my pupils pass through the portals of the Public Examination either to continue their studies further or to settle in life—a number, far larger than that experienced by many who have gathered here. I have also had opportunities of observing their careers and fortunes in life and studying within myself whether success at examinations had any direct bearing on success in life. I have, now and again, when in a vacant mood, tried to reflect whether failures in examinations have not been often stepping-stones to success in life. Whatever may be the factors that have called on me to fill this place, I again heartily thank the AIFEA for the trust reposed in me and offer them my gratitude.

This Conference is meeting at a very appropriate time when the Government of India are seriously considering the question of examination reform at all levels. They have recognised and accepted in principle that this time-honoured and traditional system of examination has not served the purpose of assessing and evaluating the personality of the individual as a whole, but has serious limitations. In the new shape to come, the pupil-evaluation will take the form of day-to-day assessments and cumulative records of work supplemented, if need be, by a final annual examination by internal or external examiners. The final ratings will depend not on any one single annual examination, even of the reformed type, but on several other salient factors, all of which will go to enable the assessment of the individual. In this context, the subject which this sectional meeting is scheduled to discuss is vital and valuable. "The Place of School Records in Public Examination" has to be defined and clarified. It may not be possible, neither is it advisable, to have uniform sets of record sheets and *pro forma* for use throughout the length and breadth of the country and thus regiment the systems and procedures involved in the scheme of assessment. On the other hand, the broad features that should govern and influence the evolution of record sheets and evaluation cards for use in schools should be discussed and enunciated to help planning and adopting them to suit individual requirements of the several States and Boards of Examinations. On this subject, such a vast literature has developed in recent years and investigations have been conducted in a scientific way with the help of psychological findings all the world over that the task of the administrator is now considerably easy and simple. The decisions of this Conference and our deliberations in this section should be a pointer in the right direction and throw light on some of the outstanding issues that face the schools and colleges to evolve suitable and workable machinery for the assessment of the pupils under their charge. Our responsibility is, in a way, therefore, very great and onerous.

* Presidential Address delivered at the 33rd All-India Educational Conference held at Chandigarh, in Dec. 1958.

THE PART PLAYED BY THE FEDERATION TOWARDS EXAMINATION REFORM

The AIFEA has been consistently pressing for this much-needed reform in examinations for the last several years. A section of the Annual Conference is specially set apart for the discussion of problems connected with examinations and reform. Wise and fruitful resolutions are being passed year after year and progress is being achieved to a small extent, but not at all commensurate with the findings of a high technical organisation like that of ours. Speaking about the unpopularity of examinations, from his presidential chair at our XXII Conference held at Trivandrum in 1946, Prof. Diwan Chand Sharma, now President of our organisation, spoke of the Traditional Examination as 'a kind of leap in the dark' to a pupil. He continued thus,— "Psychologists tell us that the fear of the unknown is the most paralysing of all kinds of fears. It is this which grips a student when he has to sit for a Public Examination. If a clerk sitting in a comfortable chair in a familiar office in India is suddenly called upon to go to the wilds of Africa where he has few friends, he will feel mortally afraid. Similarly a student in the depth of his mind feels panicky when he has to sit for a Departmental or University Examination." He advocated "all-round tests assessing the student's response to the daily work, his power of assimilation and expression, his intelligence, character and personality". I remember another President of this Section of the Conference at Mysore in 1948, Shri P. S. Naidu of Allahabad University, putting forth a fervent plea for the retention of the examination system of the essay-type as the final test of the worth of the examinees. But he agreed that it should not be the sole test. The objective tests of attainment constructed and administered by the teacher, the cumulative records maintained by the school should also be used to determine the final rating of the candidates. It was stressed by him that 50% of the marks allotted should go to the essay-type traditional annual examination, 25% of the marks should go to the objective achievement tests and the remaining 25% should go to the class records. He advocated that, in the matter of marking the scripts of the essay-type examination, new methods are to be adopted to make them as far free from subjectivity as possible. In this connection the setting up of Special Boards or any other similar suitable agency to make an investigation of the existing practices, and

to undertake intensive statistical studies of the results of examinations was considered very urgent and necessary. Last year at the Madras Session, Sri. S. Natarajan, President of the Section for Examinations, gave an inspired address that the reform of the examinations could not be delayed any longer as it had dominated the entire school course, teaching procedure, syllabus and organisation. He also made authoritative mention of the way in which the All-India Council for Secondary Education was tackling the question. More than all this, the subject has received considerable emphasis at every educational gathering of teachers of administrators.

THE CENTRAL GOVERNMENT AND EXAMINATIONS REFORM

The All-India Council for Secondary Education has been giving top-priority consideration to resolve this problem of Examination Reform. The presence of Dr. B. S. Bloom of the Chicago University in our midst has been well utilised to tackle this subject in an expert way. The deliberations and decisions taken at the Bhopal Seminar, two years ago, on the subject of examinations have aroused considerable interest in the country among teachers in schools and colleges. It has covered new ground and has made several constructive suggestions for implementation. The Universities have been seized of the matter and enthusiasm to make such changes as would not seriously affect the existing procedures and statutory obligations is clearly visible. An all-round optimism is pervading so that it is expected that important decisions in the right direction are in the offing. Several Boards of Secondary Education had already implemented some of the recommendations made at the Seminar. Examination Research Bureaux had been established in a few States. The system of internal assessment had been accepted generally and procedures are being evolved. A number of workshops on "Evaluation" conducted all over the country had helped to disseminate the new concepts of evaluation and assessment. The All-India Council for Secondary Education had established an Examination Unit consisting of 15 members to help teachers to clarify their objectives with reference to the curriculum, subject and topic, to help teachers to translate these objectives into behaviour changes on the part of the pupils, to help to develop effective learning experiences which will bring about these behaviour changes, to compile a

pool of test items and suggest test procedures which will effectively measure the amount of changes brought about and to make available for teachers a large mass of data on evaluation in class-room and examination. Last September, a Conference of the Secretaries of the Boards of Secondary Education was held at Delhi to work up 'the next stage' in Examination Reform. Representatives of the University Examination Boards had also been invited. Dr. Shrimali, inaugurating this Conference, announced that a practical programme of implementation of the reforms was being pursued. A phased programme spread over ten years within which the desired reconstruction in curriculum, teaching and testing could be realised had been outlined. He said that its successful implementation was dependent upon the successive steps the State Governments and Boards of Secondary Education intended to take. It also largely depended on the teachers whose role in this process was the most significant. In his words the present system, instead of developing the entire personality of the child, placed an almost exclusive emphasis on intellectual attainments. Many other factors of paramount importance like the student's physical build, behaviour in society, capacity for adjustments and the like which go to build an integrated personality have neither been given any importance in the educational scheme nor have been considered fit to be assessed and evaluated. Continuing further he said "when we talk of Examination Reform, few of us realise that any change in this time honoured machinery actually involves a revolutionary education. In trying to replace the present examination system we have to redefine our educational objectives and then fashion appropriate evaluation tools."

Dr. C. D. Deshmukh, Chairman of the University Grants Commission, has, in unmistakable terms, emphasised the urgency and importance of Examination Reform in the Universities as well as in the Secondary Schools. In his view, the reform in the Examination System is linked, in fact, with the entire system of Education. According to him progress has to be achieved by (1) enlarging and widening the syllabus-content to reach the ultimate objectives of Education, (2) improving teaching methods and learning experiences, (3) finding the right types of evaluation material and (4) putting an end to the various existing malpractices.

We have to endorse that it is the right way to handle the problem effectively and surely,

for, on these reforms our new education will have to be founded, nourished and developed. We look forward with hope and eagerness to the steps the Central Government and the States will initiate in the Schools and Colleges in the direction of Examination Reform.

THE TEACHER AND EXTERNAL EXAMINATIONS

Very often the question is asked "what is the role of the teacher in the assessment of his pupils?" It is rather unfortunate that the Examination System prevailing in India today has robbed the teacher largely of his inherent right to judge, evaluate and assess the worth of his pupils whom he has handled, taught and trained. It is more unfortunate that the State has not been making the best use of the teacher who has the maximum knowledge of the pupil to assess his worth and judge his attainments. This is particularly true when the assessment is controlled by an external body. The position of the teacher as an assessor of his own pupils has to remain paramount. His assessment has to receive considerable weightage at the time of working up the final ratings and deciding results. It is very pertinent here to emphasise that the system of external examinations, particularly, at the Secondary School level, has considerably reduced that professional freedom of teachers that we value most. It is very high time that we restore to the teacher that status by entrusting him more and more responsibility for assessing his pupils' abilities and by relying less and less on external examinations. Once we trust our teachers to the maximum, the response, in my opinion, will be marvellous and effective. In the words of that great educationist, the late Dr. Jeffry, as stated in one of his illuminating books "External Examinations in Secondary Schools," "the whole art of educational administration is to be ready at all times to relax controls and to recognise that teachers, generally, are worthy of a greater measure of professional freedom and responsibility to work steadily towards the stage at which all questions of professional practice are decided as far as possible by the teacher in his own class-room or, otherwise, by teachers in their corporate capacity." If such recognition is not made available, the existing conditions tend to imply "the negation of all that goes to make good teaching".

THE VERDICT ON

"TRADITIONAL EXAMINATIONS"

The Report of the University Education Commission (1949) stated that "an unsound

examination system continues to dominate instruction to the detriment of a quickly expanding system of education. In our visits to the Universities we heard, from teachers and students alike, the endless tale of how examinations have become the aim and end of education, how all instruction is subordinated to them, how they kill all initiative in the teacher and the student, how capricious, invalid, unreliable and inadequate they are, and how they tend to corrupt the moral standards of University life." If required to suggest one single reform in University education it should be that of examinations. One of the outstanding contributions made by that Commission was to point out the urgency of the reform and the constructive suggestions to make the examinations more objective and the need to make use of the class-room performance of the pupils in arriving at final decisions in the matter of awards, certificates, diplomas and degrees. It was also stated that a University degree as a qualifying hallmark for appointment in administrative services may be abandoned, as this was considered as one of the chief evils of the educational system. The Secondary Education Commission (1953) recommended a new approach to examinations and evaluation and stated that the concern of the Secondary School was to test the pupils' all-round development and not merely the intellectual attainments in certain scholastic subjects. Even regarding the test of the intellectual attainments, the traditional examinations did not evaluate correctly. They recommend that one final examination of the pupils by an external body might be retained by virtue of its having a certain amount of stimulating effect on the pupils as well as the teachers. These examinations have set some standards common to all teachers and all schools. They, however, recommend a drastic change in the matter of the pattern of the question paper, the method of evaluation and the choice of the examiners. The final annual examination conducted by an external body shall not be the sole examination for the final assessment of the pupil. The school records giving details of the work done by the pupils day-to-day together with the scores gained by them at the periodical tests and terminal examinations will be duly considered for the final assessment. The Commission have suggested a progressive evaluation of development in other directions of less importance, such as the growth of his interests, aptitudes and personality traits, his social adjustments and the practical and social activities in which

he takes part. In other words, the record will give his complete career. A cumulative record is thus one of the most valuable of the records to be used in schools. One of the recommendations of the Commission was the system of compartmental examinations. The other main reform has, perforce to be the inclusion of a number of objective tests in the final examination so as to reduce the subjective element.

PSYCHOLOGICAL TESTS AND THEIR LIMITATIONS

A Psychological test has been defined as "an objective and standardized measure of a sample of behaviour". It is seen that the whole behaviour is not intended to be measured by the test. The measure is of a human quality insofar as it manifests itself in some observable form of behaviour. In the production of a test a large amount of ingenuity, technical skill and experimental trial has to be utilised. Even in the administration of the test, the controlling of the conditions has to be accomplished by resorting to set procedures. Scoring has to be done in one and only way. To interpret these scores 'norms' will have to be provided against which the individual scores are judged and evaluated. The determination of 'norms' in an objective manner is made by administering the test to a very large number of people and finding the average at different levels of ability. Such a test is an objective, reliable and valid measure of a sample of behaviour. It is, therefore, seen that it may be a matter of extreme difficulty to have psychological tests constructed and administered to our pupils in schools to a degree that other forms of assessment and evaluation might be discarded. At best, psychological tests, under the present circumstances, may be regarded only as a supplemental tool to the other sources of assessment in practice.

THE SLOGAN OF DETERIORATION OF STANDARDS

Very often we hear from several platforms that the present decade has witnessed a serious deterioration of standards in schools. There are arguments advanced to say that the political party is partly responsible in having created situations in institutions which have engendered seeds of indiscipline, which in turn have made impossible for the school work to go on in a disciplined manner. There are a few others who say that the students of the present day do not possess that talent or that steadiness that were the attributes of the previous generation. There are still others who condemn the educational system wholesale.

There are also a few who put the whole blame on the teacher, who has been recruited without any reference to his capabilities and who, himself, is a product of the Examination System which has fallen into disrepute.

It may be true that there might have been a small deterioration in the intellectual attainments of the present-day pupils compared to those of his predecessors of the previous generation; but the pupil of to day is certainly in possession of more general knowledge, be it in scientific terminology, or political phraseology, that will help him for life far better than mere academic knowledge. His horizon has become broader and more capable of receiving additional knowledge. It is, of course, true that by a proper reorganisation of our educational techniques, like the maintenance of cumulative records, the introduction of proper incentives of work and the reformed examinations it will be possible to bring about better standards among pupils in schools. Again it has to be stressed that the aim should be the development of the individual, not merely in the narrow spheres of academic knowledge, but in all directions intellectual, physical, moral and emotional. The aim is to bring about an integration of the factors that go to make a good citizen.

EXAMINATIONS—THEIR PURPOSE

Examinations set a stage in the intellectual development of the pupils. They have long been considered as hallmarks for entry into the administrative services or for other suitable careers in life. It is particularly true at the University level. Pursuit of higher courses of study in Post-graduate colleges or technological institutions is restricted only to a small percentage of the University graduates. As the purpose of the University has to be to train for leadership, it is suggested that opportunities should be afforded to them to have learning experiences in living situations to an extent as far as possible. Hence the emphasis on the examination has to be considerably lessened and participation in the varied activities of the college life should be encouraged. Such active participation should receive approbation and should count for the final assessment of the pupil for the award of the degree.

As has been planned in this country, the examinations serve a selective purpose—selecting candidates to enter the Universities for higher studies or to take up professional courses at the technological, occupational or vocational institutions. We have also heard vehement protests from educationists all over

the country that the examinations are tending to reduce themselves at the Secondary level to this one and only purpose. Our Secondary Schools have largely concentrated their efforts to train pupils to pass the qualifying examinations for admission to the Universities rather than seek professional careers. It is a matter of extreme disappointment to forward-thinkers that even the syllabuses at the Secondary School level are dictated by the requirements of the University and drafted by the professors of the Universities. The Secondary Education Commission has rightly pointed out that this domination has partly destroyed the uniqueness of the Secondary School. The Secondary School, according to them, is the "weakest link in our educational system" and has to undergo an immediate and drastic reform. With the changed approach in the matter of examinations, the importance of Secondary Schools will have become enhanced and they will have to rate the fitness of candidates to face the demands of society in which the pupils will have to play a worthy part. Thus a shifting of the emphasis at the Secondary School level is immediately called for. The Secondary School Leaving Certificate will, hereafter, have to give the full assessment of the individual in academic work, physical prowess, specific aptitudes and personality traits. Towards this end the curriculum of the Secondary School should be enlarged, methods of work amended and evaluations undertaken.

UNIVERSITY REQUIREMENTS—EXAMPLES OF THE WEST

In this connection I would like to quote James B. Conant who has earned a name and fame as one of the greatest educationists in America, having been connected with the Harvard University as instructor, professor, and president for well over 35 years. He says that 'the problem of selecting future University students is becoming more, rather than less, difficult in England and a number of European States. The question of social prestige is being involved as it has been involved in America for the last 50 years'.

"In one county in England the experiment is being made of abolishing the examination in two selected geographical areas and sending all children from 11-15 to one school and then providing grammar school places for those whose parents are willing to keep them in school until at least 16. Presumably, ability to handle the work in grammar schools will be the determining factor in deciding who goes to the University. On the European conti-

nent too, difficulties are felt in regard to the process of selecting the future University men. The points at issue are often the exact length of the Pre-University Course and the method by which the pupils are selected for the special Pre-University Courses."

We are witnessing in India the spectacle of pupils whether they can really benefit from such education or not, entering into the Universities. The attitude of the British Educationists can be summed up in these words, "the fewer the external examinations the better for the pupils". But, if selection is essential, as it obviously is, there must be some external tests, if, for no other reason than that, standards must be uniform for admission to the various types of higher education. The questions reduce to this—At what stage are external tests essential? And what should be their nature?

EVALUATION IN SECONDARY SCHOOLS

Accepting that the pupil's progress in the academic subjects of study shall be dependent on his performance at the final external examination and also on his cumulative performance as disclosed by the periodical tests, practical work, specific assignments, and terminal Internal Examinations, the problem arises as to what weightage has to be given to the internal assessment and how a total score could be determined. There are many who ask the question, "Which is more rational or objective—organised classwork throughout the school year or a 'spot' performance at one single External Examination?" It is really true that the school activities provide a variety of opportunities for testing and carrying out an integrated curriculum involving several learning situations and vocational experiences which lend themselves to polytechnical application of the skills. Valuable valid material will have been lost sight of if the final assessment is made without due consideration of this factor. This, in a way, has to be the "Standard Index" to determine the validity of External Examinations. I am one of those who feel that more weightage has to be given to the cumulative performance of the pupil at school than to that at the final examination. I am inclined for the ratio two is to one. It shall not in any case be less than one is to one. The method of evaluation is suggested as follows: If a pupil's cumulative marks in Mathematics at school is A, it is first reduced to the same maximum, say 100, as that for the same subject at the Public Examination. Let his marks thus reduced be a . The school average in the

subject is determined. Let it be x . Then a/x is the pupil's Index Score in the subject. If this index is multiplied by the average mark in the Public External Examination in that subject, say y , then the moderated mark is equal to $a/x \times y$. Let this be m . This mark, coupled with the mark obtained by the pupil in the subject in the Public Examination, say b , will give the final score of the pupil in the subject. If the weightage is taken as two is to one, then $(2m + b)/3$ is the final score. If the weightage is taken as one is to one, then $(m + b)/2$ will be the final score. Such a moderation, if adopted, will considerably improve the validity and reliability of examinations and, further, will be a stimulus for concerted effort in schools.

In the matter of maintenance of standard record sheets and evaluation cards, this Sectional Conference has to give a definite lead and make constructive suggestions based on experience.

The full record of the individual falls under the following four distinct heads: (1) Data of the individual, giving the particulars relating to him like name, age, height, weight, home environment, parental occupation, hobbies, and such other matters of a factual nature. (2) Scholastic attainments giving full details of his scores at school, ranks and distinctions secured at the periodical tests and the terminal examinations. (3) Participation in the extra-curricular and co-curricular activities organised at school and the interest evinced in them. Distinctions secured may also be recorded. (4) Personality traits, classified and assessed on a three-point or a five-point scale, preferably the former. The distinct traits that are worthy of consideration may be tabulated by the School or, to bring about a uniformity, by the State and periodically assessed.

In this connection I commend the useful suggestions made by Sri. A. N. Basu, in his pamphlet "School Records", published by the Ministry of Education, Government of India. According to his classification the twelve traits considered predominant are the following: General Attitude, Self-confidence, Perseverance, Sociability, Courtesy and consideration for others, Emotional Control, Sense of responsibility, Integrity, Initiative, Habit of work and Leadership. The recordings are suggested on a three-point scale.

ASSESSMENT IN BASIC SCHOOLS

In the elementary schools of the future where activity programmes are being initiated and Basic Education techniques are gradually being

introduced, a better scope for the maintenance of cumulative records and assessment sheets is now becoming available. Greater encouragement is being given to the pupils in the active participation in the affairs of the school and in leading a community life. It is, therefore, considerably easier to observe children responding to the several experiences and situations that arise during the course of work. The maintenance of cumulative records of assessment in intellectual achievements, co-curricular activities and community duties day-to-day becomes one of the responsibilities of the teachers. Class promotions will have to be decided with reference to these records properly maintained. There shall be no external examinations. This opportunity afforded to the teachers has to be used with great care and devotion to advance the cause of the pupils and to enhance the prestige of the teaching profession.

The results of a little research conducted in the Post-Graduate Basic Training College, Doddballapur, may be of some interest in this connection. Ten reasons for the need of assessment of pupils in Basic Schools in regard to their class-room work were given and 116 trained officers of the post-graduate level were asked to rank them in the order of importance. The findings are given in the Appendix.

SUGGESTIONS

At the University level, it may not be possible to dispense with examinations of the Essay-type altogether, nor is it desirable, as they have served the pupils and the State all these years in a fairly satisfactory way, of course, except that in recent years on account of the great importance given to them in all walks of life, our teaching standards, curricular work, and emphasis on character development have been seriously affected. With greater control over the examinations becoming vested in teachers and heads of institutions, the undesirable elements in the system will get removed with ease as well as speed. But the Essay-type traditional examination by itself alone cannot serve us any longer. It has never concerned itself to assess the total personality of the individual and also evaluate his skills and abilities. So it is incumbent on the Universities to organise their own schemes for the conduct of periodical tests or minor examinations, if you prefer to call them so, and for the maintenance of cumulative records of work done during the year and also for the assessment of the pupils taking into considera-

tion these accumulated scores by giving due weightage at the time of final assessment. It is further incumbent on the Universities to maintain a record of the extra-curricular or co-curricular activities in which the pupils have participated and distinguished themselves.

At the Secondary stage, a greater importance has to be given to the maintenance of the cumulative records systematically. Achievements in the academic subjects of study, progress in the craft and vocational subjects studied and also the development of the personality traits should form the items of recording. The emphasis on the internal evaluations of pupil attainments should be greater than on the achievements at the one final external examination at the conclusion of the Secondary School course. This final examination shall get reformed so as to include objective tests and 'short answer' questions.

At the Primary School level, there shall be no examination by an external body. The cumulative records in the form of units scored for each and every activity in the school would provide sure and complete data to assess the progress of the pupil. Incentives for work on a planned basis will thus have been afforded making it possible to have richer targets of achievement. No system wherein the pupil-abilities are judged by an external body can be recommended at this stage. The records maintained at school should form the main basis for diagnosing the deficiencies of the pupils and for applying the necessary correctives. An all-round development of the individual shall be the main concern.

WORK AHEAD

This sectional meeting would do well if it could address itself to evolving, for the consideration of the Conference, comprehensive sample record sheets suitable for use at the University, Secondary School, and Primary School levels.

In regard to personality traits of the pupils, lots of investigations are yet to be conducted so that the chosen traits comprise the whole personality of the individual. Methods of evaluation and the machinery to be entrusted with this work are further factors that require thought and attention.

The problem before the country is one of reconstruction on sure foundations, which is, by its very nature, colossal and stupendous. In the educational work with which we are concerned, we deal with living material full of potentialities for the future progress of our

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APPENDIX Assessment of Pupils in Basic Schools

S. No.	Reasons for Assessment	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10
(The figures represent percentages)											
1	To grade pupils for administrative reasons like promotions, employment, etc.	3.45	10.35	6.90	10.34	17.24	6.90	10.34	3.45	17.24	13.79
2	To diagnose the pupils' individual potentialities	17.24	10.35	6.90	17.24	17.24	..	13.79	3.45	3.45	10.34
3	To determine the subjects of study where the achievement is the weakest and try to concentrate on reaching higher achievements in those subjects	10.35	3.45	10.35	13.79	17.24	13.79	6.90	3.45	20.08	..
4	To determine the subjects of study where the achievement is the strongest and try to concentrate on reaching higher achievements in those subjects	6.90	17.24	17.24	13.79	6.90	13.79	3.45	13.79	3.45	3.45
5	To help the pupil's self-appraisal	3.45	31.03	13.79	10.35	3.45	10.34	6.90	10.34	3.45	6.90
6	To encourage emulation and a competitive spirit	6.90	3.45	10.34	3.45	6.90	24.13	17.24	3.45	6.90	17.24
7	To enable the teacher to plan the environment for the pupils' maximum development	13.79	10.35	17.24	3.45	10.34	10.34	17.24	6.90	6.90	3.45
8	To prepare the pupil to pass the examination	..	3.45	6.90	10.34	6.90	..	3.45	3.45	24.14	41.37
9	To encourage the pupil for more active work by pointing to him his deficiencies and weaknesses	13.79	10.35	17.24	13.79	13.79	3.45	10.35	17.24
10	To fix the relative standards of pupils and thus effect a comparison	24.14	3.45	..	3.45	6.90	13.79	10.34	31.03	6.90	..

The following conclusions may be drawn :

1. There is an effective disapproval for No. 8, 65.51 per cent. have given the last two rankings.
2. There is a uniform approval for items 4, 5, 7 and 9.
3. A large per cent. are not stressing items 1, 6 and 10.
4. Items 2 and 3 take the average position.

PUBLIC SCHOOLS AND THEIR USEFULNESS*

BY SHRI E. W. FRANKLIN

Retired Director of Public Instruction, Madhya Pradesh

CRITICISM of Public and Residential Schools has been more unfavourable than favourable. Momentous changes are expected in the structure, content and objectives of Secondary Education in this country. The Secondary Education Commission seem to have concluded that Public and Residential Schools 'may just be tolerated' and that these are a 'necessity'. But the importance of the role of Public Schools in the system of Secondary Education has to be properly assessed. There are two chief characteristics of these schools namely, (a) their Boarding Arrangements and (b) Independence of national or local control. Both combine to make the schools expensive and necessitate high tuition fees. Many of the parents who send their children to Public Schools are not wealthy. To educate their sons and daughters in a Public School involves them in considerable expense and denial of personal convenience, which can be avoided if they decide in favour of ordinary schools. Such parents are drawn towards these schools, because of their aims which keep a student usefully occupied 'for twenty-four hours a day, for seven days a week and for all the working weeks in the year', and also provide him with an opportunity to live a corporate life against a 'stable and continuous background', comprising boys drawn from the different sections of society. This helps a student to develop sense of adjustment, which contributes considerably towards his integrated personality and emotional stability.

A Public School is 'obliged to provide for the physical, spiritual, moral, æsthetic and intellectual development' of its wards, thus giving a lie to the erroneous criticism that a Public School emphasises 'character-

building at the expense of brains'. Activities which are described as extra-curricular in a Day School form an integral part of the programme in a Public School. Again, a school master's job in a Public School is a whole-time job; he is expected to be harder than a teacher in an ordinary Day School.

The House System in a Public School affords senior students and prefects wholesome opportunities to develop and cultivate sense of responsibility and authority. Besides, in a Public School the Headmaster, as the man at the wheel, is never interfered with; he is left free to exercise his initiative and drive to the best advantage of the school over which he presides. Every Public School jealously guards its traditions and reputation, and believes strongly that 'in any nation' there should exist communities which are independent of national control. Public Schools are important 'in the life of a democracy, since they are based on the free association of individuals to provide a particular type of education'; and educationists today maintain that rather than these schools should 'be swept away', efforts should be made to make these accessible to students 'best fitted to profit by them'. The award of scholarships by the Ministry of Education is a positive major step in this direction, but it has to be supplemented by other effective steps so as to help brilliant poor students.

With all their shortcomings, Public Schools 'promote values without which the nation's life would be the poorer, viz., independence stability, the life of a close-knit community, respect for both the intellect and other elements which go to make a man'.

The fact that Public Schools have survived adverse criticism establishes their useful existence, held necessary to meet the 'need' of the country.

(Continued from page 288)

land. As great men have called it, this 'human asset' has to be dealt with all the care and devotion that is at our command. We want to see that the future generation gets the equipment that is of the highest order, necessary in a changing democracy. In this task, I like to emphasise how largely the assessments of

teachers under whose care pupils work will be valuable to shape our growing young men and women. We have a right to claim ourselves as the builders of a resurgent India. May posterity declare that we have played our part nobly and well at a time when we were called upon to do so.

XXXIII ALL-INDIA EDUCATIONAL CONFERENCE

General Resolutions Passed

1. The 33rd Conference of the A.I.F.E.A. records its deep sense of grief at the sad and sudden death of Moulana Azad and shares the feeling of great loss which education in India has suffered by his demise. It records its high appreciation of his services to the cause of Indian Education in particular and the promotion of freedom and unity in India in general.

2. This Conference records its deep sense of sorrow at the untimely demise of Shri Kamalleshwari Prasad, Secretary, Vocational and Technical Educational Section, who had endeared himself to all members of the Federation by his sincere and devoted service.

3. The Conference authorises the Council of the A.I.F.E.A. to take steps for the effective observance of United Nations Day on the 24th October each year laying stress on the functions of its non-political agencies.

4. This Conference recommends the following for the promotion of National Unity through education without prejudice regarding normal academic work.

- (a) Translations of the Classics from the one principal Indian language into another.
- (b) Inclusion of at least one Indian language in the curriculum of Higher Secondary Schools, and of at least two Indian languages as elective subjects in that of every University in India.
- (c) Inter-State tours by students and teachers.
- (d) Inter-State exchange of College and University teachers.
- (e) Inter-State festivals of Colleges and Universities in sports, games, debates and other cultural activities.
- (f) Publication of an *All-India Journal of Education* for students.
- (g) Increased support to State and National journals by teachers.

5. This Conference records its view that for the effective implementation of the Education Programme in the development plans there should be close consultation between the A.I.F.E.A. and the Educational authorities. It calls upon the Council of the Federation to prepare a programme for education development in the 3rd plan period.

6. The Conference recommends that greater representation should be accorded to teachers in our cultural delegation to other countries and in the appointment of Cultural attaches in our Missions abroad.

7. This Conference addresses the Universal Declaration of Human Rights adopted by all the member States of the U.N.O. and invites particular attention to Article 26 of the said Declaration which states "That the parents shall have the prior right to choose the kind of education which shall be given to their children".

8. This Conference is deeply concerned over the most uneducational and wasteful experiment of Nationalisation of Text-Books carried on by certain State Governments against the advice of such bodies like the Secondary Education Commission, the International Team of Experts and the A.I.F.E.A. It reiterates its last year's resolution on this subject and appeals to the Union and State Governments to revise their policy in this regard.

9. In order to ensure satisfactory progress of education throughout this country, this Conference recommends the setting up of a Cadre of an Indian Educational Service on par with the I.A.S.

10. This Conference is of the view that education being so vital to the development of the country, every effort should be made for increasing educational facilities thereby ensuring high quality and standards. It calls upon all citizens to give liberal financial support to education and, where necessary, to establish and maintain educational institutions.

Manual Work and Intellectual Training

"We have upto now concentrated on stuffing children's minds with all kinds of information without ever thinking of stimulating and developing them. Let us now

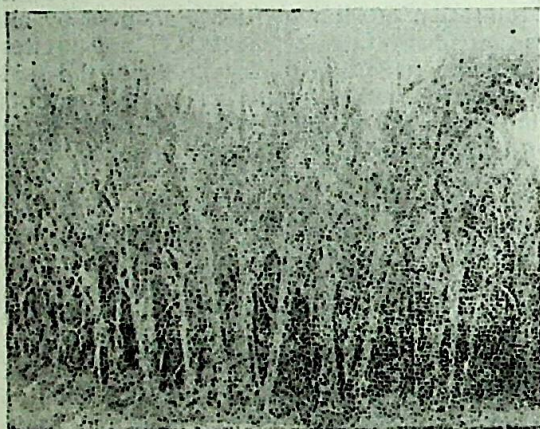
cry a halt and concentrate on educating the child purely through manual work, not as a side activity but as the prime means of intellectual training."—MAHATMA GANDHI.

AN AGRICULTURAL HIGH SCHOOL AT WORK

Chikkanahally

By SHRI B. M. ANNIAH

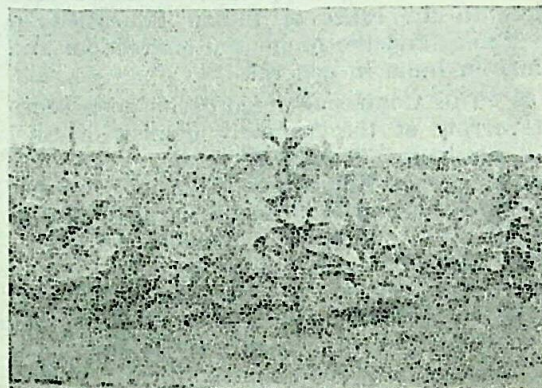
DRIVE down just sixty-nine miles from Bangalore on the Bangalore-Bombay National High Way and turn to your right. Uprising on a site of more than ten acres and lording over the surroundings stands a castle-like structure. This is the building that housed an Agricultural School, Chikkanahally, for the training of field-men for appointments of lower subordinates in the Agricultural Department from 1918 to 1953. Its history is quite interesting for scarcely could one expect to find such a good building in these typically rural parts for housing a school.



Sugarcane— The School's reward.

The building was constructed by the late Shri Ugge Gowda whose impulse of generosity has become a byword in these parts. He desired that it should serve the purpose of a choultry for affording lodging and cooking facilities to travellers who in these days had no swifter means of communication than the bullock cart and who had necessarily to rest at several places before they could reach their destination. While casually passing along that road on an official tour Dr. Coleman, the then Director of Agriculture, espied the building and was fascinated with it and made kind enquiries regarding the purpose the building was intended to serve. With his characteristic foresight and aliveness to the needs of the community he felt almost at the same instant that the building had better be used for conducting an Agricultural School and pressed Mr. Ugge

Gowda to act on his suggestion. And ere long, an Agricultural School started to work with all the advantages of building, farm and equipment and it was the general impression that this school was among the best for affording Agricultural Education.



Tobacco is the farm's pride.

As years rolled on it was felt that the institution could perhaps serve the community still better and the ambit of its service and usefulness expanded when it was raised to the status of a Government High

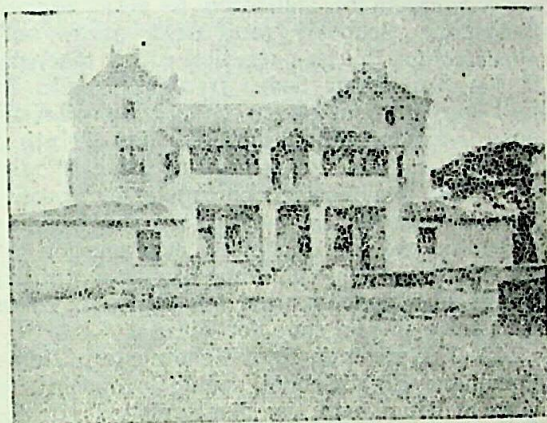


Ragi—Ready for harvesting.

School with the main accent being laid on Agriculture. Thanks to the sympathetic handling of the question by the Government and its interest in providing expanding facilities for good education to the rural folk, the School became converted to

a Government High School from June 1953.

With an exquisitely well maintained farm in an extensive plot and immense possibilities of development and a tradition for agricultural education hopes are raised to build a unique institution. To encourage students to prefer Agriculture to other subjects for Optional study, the best of them—twenty-five in number—are being awarded Agricultural Scholarships which carry full free-ships with them. They have to stay in the hostel and do one hour of intensive practical work in the farm everyday.



School Building donated by late Shri Ugre Gowda.

It is but natural that with the reorganisation of Secondary Education that is soon to take effect with vocational subjects gaining precedence over the academic ones, this School must have its own distinct and important role to play in the education of

the rural children of our State. The farm of the School is 70 acres in extent and has a dependable water-supply. Besides the perennial crops like cocoanut and mango seasonal crops are grown according to plan. The food crops like paddy, ragi and sugarcane attract no less attention than the cash crops like groundnut, chilly and tobacco.

With the introduction of crafts in schools from next year, a study has to be made of the crafts that could be fittingly introduced in the school so that they might harmonise with the agricultural type of education that is being imparted here and which, if any, should gain a still higher ascendancy of importance in the years to come. It is gratifying to learn that the Department of Public Instruction which has been viewing always the problems of this School with a paternal eye, has permitted the introduction of Bee-Keeping and Horticulture as crafts from next year.

THE URGENT NEEDS OF THE SCHOOL ARE ITS

The School has a great future and it is no wonder if it occupies a premier place as a rural High School in the years to come. There are many difficulties in the way, no doubt. But, with a zealous band of workers, sympathetic co-operation from an understanding public and above all expanding patronage and encouragement from the Department of Public Instruction it is not too much to hope that the bright era would soon begin for the School and the dream of making it a unique institution in Mysore State be realised.

SOME OPINIONS

1. The Journal supplies interesting and informative reading material to readers. Paper-making as a school craft by Shri P. N. Virkar, Superintendent, New English School, Poona-2, breaks new ground and gives all the necessary information. Evaluation and Examination by Shri M. S. Satyasmurthy is also a thought-provoking article.
—*Bombay Educational Journal*,

2. The magazine is the only Education journal in the Mysore State having a wide circulation and reaching every Middle School and High School in the State.

The aim of the magazine is to serve the cause of education. An attempt is being made to make it one of maximum usefulness to the practising teacher by discussing educational problems and giving a wide coverage of progressive educational thought.

The Journal has been well received by the educationists in the country.

OUR ASSOCIATIONS

Mysore Teachers' Association

ALL the Teachers and Heads of High Schools and Training Institutions in Mysore City got up a delightful function on the 15th December 1958, in Marimallappa's High School Building, to felicitate Sri. A. C. Deve Gowda, M.A. (Col.), B.T., M.Ed. (Leeds), the New Director of Public Instruction.

The function was unique because Teachers and Heads of High Schools and Training Institutions for Boys and Girls, Government and Aided, numbering about 400 assembled together and as one body and with all sweet accord offered their loyal and loving welcome to Mr. A. C. Deve Gowda. A Guard of Honour was presented by the N.C.C. Unit and after Tea, the function began with Invocation by Teachers of Maharani's High School. Sri T. Vasudeviah, M.A., M.Ed. (Leeds), Deputy Director, Mysore Division, welcomed the distinguished guests. There were several delightful items of entertainment like orchestra, readings, comic, and dance, contributed by different High Schools in the City.

Srimathi R. Grace Pitchamuthu, Superintendent, Women's Training College, felicitated the D.P.I. in a short speech. Messrs. K. V. Narayan and S. Rajagopala Iyengar of Sarada Vilas High School, S. Krishnappa of the Institute of Education, and H. Anantha Rao of Mahajana High School presented certain educational problems of current interest before the D.P.I.

The D. P. I., in his reply, dwelt at length on the different problems facing the Department particularly relating to the causes of the unsatisfactory progress of education in our country, the complications arising out of the integration of five different areas of Karnataka in New Mysore, the evolving of a common pattern of education in New Mysore, the introduction of the New Curricula of studies from next June in our Elementary and Secondary Schools, the immediate problem of transition to New Higher Secondary Schools from next year, and appealed for the co-operation of all teachers in his stupendous task. It was his aim to see that more attention should be paid in schools for teaching Fine Arts like Painting and Music, that Physical Education should be placed on better footing and Medical Inspection should be made more effective.

In the end he expressed appreciation of the honour done to him by this unique gathering of teachers and felt happy at their confidence in and love for him.

Mr. C. Narasinga Rao, Headmaster, Vidya Vardhaka High School, while proposing a Vote of Thanks to the distinguished guests, echoed the unanimous feelings of joy and satisfaction of all the teachers gathered and assured the D.P.I., on their behalf, their loyal and sincere co-operation.

With the singing of National Anthem, the pleasant function came to a close.

C. NARASINGA RAO.

(295 ನೇ ಪುಟದಿಂದ ಮುಂದುವರಿದು)

ಅಡಗಿದೆ. ದಾರಿದ್ರ್ಯ, ರೋಗ ರುಜಿನಾದಿಗಳನ್ನು ಹೋಗಲಾಡಿಸಲು ಇಂದು ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರದ ಉಪಯೋಗ ಮಾಡಿಕೊಳ್ಳುತ್ತಿದ್ದೇವೆ.

ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆಯ ಗುರಿಯು ಉಪಯುಕ್ತತಾ ದೃಷ್ಟಿ, ಶಿಸ್ತಿನ ದೃಷ್ಟಿ, ಸಾಂಸ್ಕೃತಿಕ ದೃಷ್ಟಿ ಇವುಗಳಿಂದ ಕೂಡಿರಬೇಕು. ಮಗುವು ತನ್ನ ವೈಜ್ಞಾನಿಕ ಜ್ಞಾನವನ್ನು ನಿತ್ಯ ಜೀವನದಲ್ಲಿ ಬಳಸುವಂತಿರಬೇಕು. ತನ್ನ ಭೌತಿಕ ಸನ್ನಿವೇಶವನ್ನು ತಾನು ಅರಿತುಕೊಳ್ಳಬೇಕು. ಆ ಸನ್ನಿವೇಶಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ತನ್ನ ಸ್ಥಾನವನ್ನೂ ಅರಿತುಕೊಳ್ಳಬೇಕು. ಸಮಸ್ಯೆಗಳನ್ನು ಎದುರಿಸುವ ವಿಧಾನವನ್ನು ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆಯು ಜೀವನ ಶಿಕ್ಷಣ

ಶಾಲೆಗಳಲ್ಲಿ ಒದಗಿಸಿ ಕೊಡಬೇಕು. ಸಮಸ್ಯಾಪರಿಹಾರದಲ್ಲಿರುವ ಸಾಮರ್ಥ್ಯಗಳ ತರಬೇತಿಯು ಹಿಂದಿಗಿಂತ ಈಗ ಪ್ರಾಮುಖ್ಯ ಸ್ಥಾನವನ್ನು ಪಡೆದಿದೆ. ಶಾಲೆಯಲ್ಲಿನ ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆಯು ಸಮಸ್ಯೆಗಳನ್ನು ಮನ್ನಣೆ ಕೊಡಲು ಹಾಗೂ ಪರಿಹರಿಸಲು ವಿದ್ಯಾರ್ಥಿಗೆ ಕಲಿಸಿದರೆ, ಅವನು ಸಮಾಜದಲ್ಲಿ ಹೊಂದಿಕೊಂಡು ಸಹಕಾರ ಜೀವನ ಸಾಗಿಸಲು ಸುಲಭವಾಗುತ್ತದೆ. ಆಧುನಿಕ ಜೀವನದಲ್ಲಿ ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರವೆಂದರೆ, ಪರೀಕ್ಷಿಸಲ್ಪಟ್ಟ ನಿಯಮಗಳು, ತತ್ವಗಳು, ಆಶ್ಚರ್ಯ ಕಥೆಗಳೊಂದಿಗೆ, ಅಪಾರ ಪರಿಶ್ರಮದೊಂದಿಗೆ, ಅದ್ಭುತ ಸಾಹಸದೊಂದಿಗೆ ಜೋಡಿಸಿರುವ ಜ್ಞಾನಸಂಪದವಾಗಿದೆ. ಇದು ಪ್ರತಿಯೊಂದು ಮಗುವಿಗೂ ಸಾಂಸ್ಕೃತಿಕ ಹಿನ್ನೆಲೆಯನ್ನು ಕೊಡತಕ್ಕದ್ದು.

ಜೀವನ ಶಿಕ್ಷಣ ಶಾಲೆಯಲ್ಲಿ ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆ

ಶ್ರೀ ಎಂ. ಕೇಶವರಾವ್, ಬಿ.ಎಸ್.ಸಿ. (ಮೈ.), ಡಿ.ಇಡಿ. (ಬೋ.), ಸ್ಕೂಲ್ ಅಸಿಸ್ಟೆಂಟ್, ಗೌರ್ನಮೆಂಟ್ ಬೇಸಿಕ್ ಟ್ರೈನಿಂಗ್ ಸ್ಕೂಲ್
ಉಡುಪಿ (ದ.ಕ.)

ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರವು ಮಕ್ಕಳ ಸ್ವಾಭಾವಿಕ ಆಸಕ್ತಿಗಳಿಂದ ಮತ್ತು ನಿತ್ಯ ಚಟುವಟಿಕೆಗಳಿಂದ ಪ್ರಾರಂಭವಾಗುತ್ತದೆ. ನಮ್ಮ ಸುತ್ತಮುತ್ತಲಿನ ವಸ್ತುಗಳ ಜ್ಞಾನ ಹೆಚ್ಚುತ್ತಾ ಹೋಗುತ್ತದೆ. ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರವು ಮಕ್ಕಳನ್ನೂ, ನಮ್ಮ ಮನೆಯ ಸನ್ನಿವೇಶವನ್ನೂ ಹೆಚ್ಚು ನಿಕಟ ಸಂಬಂಧದಲ್ಲಿಟ್ಟು ಕೊಳ್ಳುತ್ತದೆ. ಮಗುವಿನ ಮನೆಯ ಜೀವನಕ್ಕೂ, ಶಾಲೆಯ ಜೀವನಕ್ಕೂ ಸಂಬಂಧವನ್ನು ಕೊಡುತ್ತದೆ. ಆದುದರಿಂದ ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಶಿಕ್ಷಕನು ಹಳ್ಳಿಯ ಅಥವಾ ಪೌರ ಜೀವನದ ಬಗ್ಗೆ ನಿಕಟ ಸಂಪರ್ಕವನ್ನು ಇಟ್ಟುಕೊಳ್ಳುವ ಒಂದು ವಿಶೇಷ ಜವಾಬ್ದಾರಿಯನ್ನು ಹೊತ್ತಿದ್ದಾನೆ. ಏಕೆಂದರೆ ತನ್ನ ವಸ್ತು ವಿಷಯವು—ಮಕ್ಕಳ ಅನುಭವದ ಪರಿಚಯದ ಸನ್ನಿವೇಶಕ್ಕೆ ಸಂಬಂಧಿಸಿರಬೇಕು ಮತ್ತು ಸೂಕ್ತ ಯೋಜನೆಯಾಗಿರಬೇಕು. ವಸ್ತು ವಿಷಯವನ್ನು ಉತ್ಪಾದಿಸಿದುದಿಲ್ಲದ ಶಿಕ್ಷಕನು ಸಂಶೋಧಕನಿರಲೇಬೇಕು. ಹವಾಗುಣ, ನಕ್ಷತ್ರಗಳು, ಯಂತ್ರಗಳು ಆಸಕ್ತಿಯುಕ್ತ ವಿಷಯಗಳಾಗಿ ನಿರೀಕ್ಷಿಸಿ ಮಕ್ಕಳ ಮುಂದಿಡಬೇಕು. ಮಗುವು ತನ್ನ ಸ್ವಂತ ನಿರೀಕ್ಷೆಯಿಂದ ಏನನ್ನಾದರೂ ಹುಡುಕಿದರೆ, ಅದು ಮಗುವಿನ ದೃಷ್ಟಿಯಿಂದ ಒಂದು ಶೋಧನೆಯೇ ಸರಿ. ತಾನು ಓದಿದುದು ಅಥವಾ ಕೇಳಿದುದಕ್ಕಿಂತ ಈ ಶೋಧನೆಯು ಹೆಚ್ಚಿನ ಮಹತ್ವವನ್ನು ಪಡೆದಿದೆ. ಒಬ್ಬ ಚಿಕ್ಕ ಮಗು ತನ್ನ ಶಿಕ್ಷಕನಲ್ಲಿಗೆ ಪರಿಚಯದ ವಸ್ತುವನ್ನು (ವಿದ್ಯಾರ್ಥಿಗೆ ಹೊಸ ವಸ್ತು) ಶೋಧಿಸಿದನೆಂದು ತಂದು ತೋರಿಸುವಾಗ—ಅದು ಸಂಶೋಧನೆ. ವಿದ್ಯಾರ್ಥಿಯ ಆ ಶೋಧನಾ ಸಂಶೋಷಣೆ ಅನುಭವದಲ್ಲಿ ಶಿಕ್ಷಕನು ಉತ್ತಮವಾಗಿ ಭಾಗವಹಿಸಬೇಕು. ಯಾವುದೇ ಕಾರಣದಿಂದಲಾಗಲೀ ಶಿಕ್ಷಕನು ವಿದ್ಯಾರ್ಥಿಯನ್ನು ನಿರುತ್ಸಾಹಗೊಳಿಸಬಾರದು. ತನಗೆ ಆಸಕ್ತಿಹೀನತೆಯಿಂದಲಾಗಲೀ, ತಾನು ಮೇಲೆಂಬ ದೃಷ್ಟಿಯಿಂದಾಗಲೀ ನಿರುತ್ಸಾಹಗೊಳಿಸಬಾರದು. ಶಿಕ್ಷಕನ ಆಸಕ್ತಿಹೀನತೆ, ಮೇಲೆಂಬ ದೃಷ್ಟಿ ಇವು ಮಗುವಿಗೆ ತನ್ನ ಆಸಕ್ತಿಯುಕ್ತ ವಿಷಯವು ಪ್ರಧಾನವೇ ಆಗುವೆಂದು ಭಾವಿಸುವಂತೆ ಮಾಡುತ್ತವೆ. ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರದ ತಳಹದಿಯಿಂದರೆ ಎಚ್ಚರಿಕೆಯ ನಿರೀಕ್ಷೆ. ಪಕ್ಷಪಾತವಿಲ್ಲದ ಯಥಾರ್ಥ ವರದಿ ಕೊಡಲು ಶಿಕ್ಷಕನು ಕಲಿಸಬೇಕು. (ತಾವು ನೋಡಿದ ವಸ್ತುಗಳ ಬಣ್ಣ, ಆಕಾರ, ರೂಪ)

ತಮ್ಮ ಅಭಿಪ್ರಾಯಗಳನ್ನು ತೀರ್ಮಾನಿಸಲು ಮಕ್ಕಳಿಗೆ ತರಬೇತಿ ಕೊಡಬೇಕು.

ಮಗುವು ಸ್ವಾಭಾವಿಕವಾಗಿ ಚಟುವಟಿಕೆಯಿಂದಿರುತ್ತದೆ. ಮಗುವು ಅನೇಕ ವಿಧಗಳಾದ ಪ್ರತ್ಯಕ್ಷ ಕಾರ್ಯಗಳಲ್ಲಿ ಆಸಕ್ತಿ ತೆಗೆದುಕೊಳ್ಳಬಲ್ಲದು ಮತ್ತು ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ. ಅನೇಕ ಶಾಲಾ ವಿಷಯಗಳನ್ನು ಅರ್ಥಮಾಡುವಷ್ಟು ಬುದ್ಧಿ ಪ್ರಬುದ ತೆ ಬರುವವರೆಗೆ ಈ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ಭಾಗವಹಿಸುವುದು ಉತ್ತಮ. ಬೇರೆ ಬೇರೆ ವಿಷಯಗಳ ಮಹತ್ವವನ್ನು ಗೊತ್ತುಹಚ್ಚುವ ಸಾಮರ್ಥ್ಯ ಪಡೆಯುವ ಮೊದಲು—ಮಗುವು ತನ್ನ ಸ್ವಂತ ಕುತೂಹಲಯುಕ್ತ ಮತ್ತು ಬುದ್ಧಿಯುಕ್ತ ಆಸಕ್ತಿಗಳಲ್ಲಿ ತನ್ನ ಮನಸ್ಸನ್ನು ಹರಿಸುತ್ತದೆ. ಈ ಮಹತ್ವವಾದ ಮನೋವೈಜ್ಞಾನಿಕ ತತ್ವವನ್ನು ವಿಜ್ಞಾನ ಶಿಕ್ಷಕನು ನೆನಪಿಡಬೇಕು. ಮಹತ್ವವಾದ ಅಂಶವೆಂದರೆ, ಮಗುವಿನ ಮನಸ್ಸು ಅಖಂಡವಾದದ್ದು, ತನ್ನ ಅನುಭವವನ್ನು ಏಕಮಾತ್ರವೆಂದು ಅದು ವಿಮರ್ಶಿಸುತ್ತದೆ. ಸಂಬಂಧವಿಲ್ಲದ ಭಿನ್ನಾಭಿನ್ನ ಜೂರುಗಳೆಂದು ಗಣಿಸುವುದಿಲ್ಲ.

ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆಯು ಮಗುವಿಗೆ ವ್ಯವಹಾರಿಕ ಬೆಲೆಯನ್ನು ಕೊಡಬಲ್ಲದು. ಎಚ್ಚರಿಕೆಯ ನಿರೀಕ್ಷೆ ಮತ್ತು ಯಥಾರ್ಥ ವರದಿಗಳ ತಯಾರಿ, ತೀರ್ಮಾನಕ್ಕೆ ಬರುವ ಮೊದಲು ಹೇಗೆ ವಾಸ್ತವತೆಗೆ ಲಕ್ಷ್ಯಕೊಡುವುದು ಈ ಅಂಶಗಳಿಗೆ ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆಯು ತರಬೇತಿ ಕೊಡುತ್ತದೆ. ಉತ್ತಮ ನಾಗರಿಕರಾಗಲು ಅದು ತರಬೇತಿ ಕೊಡುತ್ತದೆ. ಆಧುನಿಕ ಜಗತ್ತನ್ನು ತಿಳಿಯಲು ನಮ್ಮ ಮಕ್ಕಳು ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರದ ಜ್ಞಾನವನ್ನು ತಿಳಿದಿರಬೇಕಾಗಿರುತ್ತದೆ. ಇಂದಿನ ಆಧುನಿಕ ಜಗತ್ತು ವೈಜ್ಞಾನಿಕ ಸಂಶೋಧನೆಗಳ ಮೇಲೆ ಮತ್ತು ಶೋಧನೆಗಳ ಮೇಲೆ ಅವಲಂಬಿಸಿದೆ. ಪ್ರಜಾರಾಜ್ಯದ ಉತ್ತಮ ನಾಗರಿಕನಾಗಬೇಕಾದರೆ ಮಕ್ಕಳು ಉತ್ತಮ ಶಿಸ್ತುಳ್ಳ ಮನಸ್ಸನ್ನು ಪಡೆದಿರಬೇಕು.

ವಿಜ್ಞಾನ ಶಾಸ್ತ್ರ ಬೋಧನೆಯ ಬುದ್ಧಿ ಪ್ರಧಾನ ಮಹತ್ವವು ಇದರಲ್ಲಿ ಅಡಗಿದೆ. ಅಪಾರ ಪರಿಶ್ರಮ, ಸತ್ಯಕ್ಕೆ ಅನೋಘ ಮನ್ನಣೆ, ದತ್ತಾಂಶಗಳಿಂದ ನಿಷ್ಪಕ್ಷಪಾತದಿಂದ ಅಭಿಪ್ರಾಯ ನಿರ್ಣಯ—ಇವುಗಳಲ್ಲಿ

(294 ನೇ ಪುಟವನ್ನು ನೋಡಿ)

EDUCATIONAL NOTES

Control of Education and the People's Role

ADDRESSING a Conference of Educational Officers and Educationists in Kerala recently, Dr. K. L. Shrimali, Union Minister for Education, said that he was of the opinion that entire issue of the relationship between the State and private agencies running educational institutions in the country had to be examined thoroughly. Making a passing reference to the Supreme Court's opinion on the Kerala Education Bill, he said that possibly certain clauses in the Bill might need changes or revision, but if they were clear about their ultimate objective, he did not think there would be any room for trouble.

Though education was a State subject, the Central Government had, with the co-operation and collaboration of the States, been able to obtain a general agreement on national policies in regard to education. This was a significant development in the field of education in the country.

Discussing the medium of instruction in the school and university stages, he said,

most of the States had agreed to the three-language formula in schools, namely, Hindi, the regional language, and English. As regards University medium, the regional language would ultimately have to become the medium of instruction. They had to examine whether the regional languages in India had fully developed to be made the medium in the University stage.

Before they could change over to the regional language as the medium in colleges, they had to produce a good number of high standard books in that language. For some time to come, at least as far as science and technology were concerned, they would have to depend on English. He would be happy if they had a uniform medium of instruction in all Universities.

It was very important that in a democratic society, the ultimate control of education should vest in the people. The State, however, may retain policing power to be exercised when necessary.

Education to Discriminate the Good and Bad Values of Human Life

DELIVERING the Convocation Address at the S.A. Jain College, Ambala, Shri Morarji Desai, the Union Finance Minister, stated that the country had been welded into a well-knit unit, and that the Government was trying to promote education so as to give every young man and woman a chance to develop his latent capabilities and help consolidation of freedom.

He emphasised that a mere change in the text-books or the syllabi would not solve the problem. Conditions should be created in which every citizen would be contented.

There is no dearth of intellectual resources in the country but we have to bring about

a change in our approach to the education so that young men could follow the path of righteousness and fearlessness. It is no longer intended to produce white-collared clerks to man offices. A new educational system is required not only for the development of mind but also for the proper utilization of the power of the developed intellect in order to discriminate between the good and bad values of human life. The real education should make young men self-reliant and self-sacrificing. Further, it should imbibe in them the spirit to live for others.

Broad Outlook on Life Essential

In his address to the instructors under training at Faridabad under the National Discipline Scheme, Pandit Jawaharlal Nehru said that learning was a continuous process and one had to learn throughout one's life. One of the important functions of education was to make pupils open-minded. This, in turn, would broaden their outlook on life and so the more they learn, the more they would progress, and the more they would contribute to make the country and the nation march forward. Education shall not

be confined to the contents of text-books. The child had to be given education to develop in an all-round way. Students should particularly keep their minds fresh and understand clearly the developments in the country and also acquaint others with them. Young men and women should realise the great changes that have taken place in this country under the influence of Mahatma Gandhi these 40 to 50 years and understand the Gandhian era and its fundamental principles.

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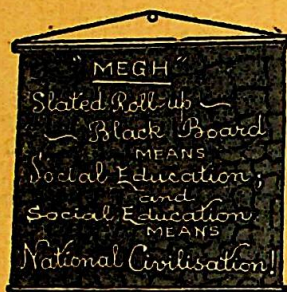
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